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ABSTRACT

This paper justifies the presentation of a Ph.D. thesis about computer-assisted Ndjebbana on a digital video disc (DVD). Ndjebbana is a language spoken by 200 Kunibidji, the indigenous landowners of Maningrida on the north coast of Arnhem Land, Australia. Simple digital talking books about the community were created in Ndjebbana and then presented on touch-screen computers located in Kunibidji houses. Kunibidji social practice and discourse around the computer were recorded on digital video, and the traces of what the screen displayed were recorded on the computer and later synchronized with the video. Using DVD technology, the Ndjebbana talking books and the digital video can be integrated into a scholarly text for academics and an Ndjebbana-narrated report for the Kunibidji, which can be combined to present a thesis. From a theoretical perspective, a thesis on a DVD can be located in the center of critical literacy, a critical theory of technology, and critical research methodologies. There are also logistical, semiotic, and ideological reasons for presenting a thesis about computer-assisted Ndjebbana on DVD. Such a presentation will link the tools and data of the research with academic discourse and will also support the empowerment of the Kunibidji by making them more informed about the research process. (Contains 52 references) (Author/SV)

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Why should I present a thesis on Computer Assisted Ndjébbana on DVD ?

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Abstract

This paper justifies the presentation of a Phd thesis about Computer Assisted Ndjébbana on a Digital Video Disc (DVD). Ndjébbana is a language spoken by 200 Kunibídji who are the traditional indigenous Australian landowners of Maningrida in Arnhem Land, Australia. The tools of this study are simple digital talking books that were created in Ndjébbana and then presented on touch screens computers. The data was the interaction around the touch screens that was recorded on digital video. Using DVD technology, the Ndjébbana talking books and the digital video can be integrated into a scholarly text for academics and Ndjébbana narrated report for the Kunibídji, which can be combined to present a thesis. From a theoretical perspective, a thesis on a DVD can be located in the centre of critical literacy, a critical theory of technology and critical research methodologies. There are also logistical, semiotic and ideological reasons for presenting a thesis on about computer assisted Ndjébbana on DVD. Presenting Computer Assisted Ndjébbana on DVD will link the tools and data of the research with academic discourse to enhance the examination process and will also support the empowerment of the Kunibídji as they are more informed about the research process.

Introduction

One of the paradoxes of the academic world is how we have incorporated multimedia into lectures and presentations, yet we still report theses in books. While we have been quick to apply the multimedia capabilities of the computer to engage the interest of our students we do not make use of these aids in most journal articles or theses. However, the use of multimedia may be central to how arguments are now developed and knowledge is conceptualised. This may be particularly relevant when applied to research carried out in a cross cultural context. While every picture tells a story, these pictures are becoming more complex, such as video, and they can play an integral role in describing the data that is crucial to answering questions in qualitative research. Using DVD technology we now have the capability of integrating these other channels of media with text to provide more accurate way of reporting research. My research provides an example of the increasing complexity of multimedia in qualitative research.

For the past ten years I have lived and worked in Maningrida, an Indigenous Australian community on the coast of Arnhem Land. During this time I have developed a relationship with the 150 Kunibídji, who are the traditional owners of the land and seas close to Maningrida

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and who all speak Ndjébbana as their first language. As a non-indigenous Australian researcher, I developed research partnerships with the Kunibídji to develop electronic interactive Ndjébbana resources, called Ndjébbana talking books. Each talking book has elements of text, sound and pictures and represent stories about the community and life around Maningrida. These stories, which became the tools of my research, were displayed on touch screen computers in Kunibídji houses. The interaction around the computer was recorded on digital video and the traces of what the screen displayed were recorded on the computer and later synchronised with the video.

DVD technology is one way of integrating and storing the multimedia data generated from this study. Although DVD's have been used to display videos, they are also useful for storing and presenting data. While only a limited number of computers can write to DVD's the number that can read DVD's is steadily increasing. At present DVD's used for data can hold between 4.7 to 18 gigabits of information. Compared with CD's the DVD's can hold at least 6 times more data. This new technology has application in reporting my research on computer assisted Ndjébbana. Using DVD technology, I can now embed the tools and data of my research in a textual critique to more accurately conceptualise Computer Assisted Ndjébbana.

This paper presents arguments for presenting my Phd thesis on DVD. I will briefly outline a theoretical framework that positions a thesis from critical research methodology, critical literacy and a critical approach to technology. I will then present logistical, semiotic and ideological arguments for presenting my thesis about Computer Assisted Ndjébbana on DVD. Logistically, the historical and social context of my research suggests the tools and data are best represented in a DVD form. From a semiotic perspective, there is an assumption that literacies are changing and the reporting of research, where possible, needs to incorporate these new literacies. I will finish my arguments with an ideological perspective that examines the empowerment of the Kunibídji by the integration of oral and written narratives on a DVD, while following sound ethical guidelines.

A theoretical framework

The theoretical framework of my thesis is a good starting point to position a DVD thesis with other relevant theory as shown in Figure 1.

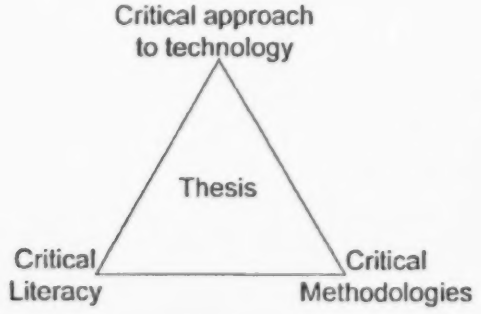

Figure 1: A thesis from different Critical theoretical perspectives

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From Figure 1, I can demonstrate that my thesis takes a critical perspective of research methodology, social literacy and technology. A critical research methodology does not just describe research, it uses research to redefine social theory (Carspecken 1996:3). This methodology has application to indigenous research context. Smith, L.T. (1999:124), for example, highlights the political context of research and deconstructs the power struggles in indigenous research contexts. However this political nature of research is not found in definitions of research used by many Australian universities. The Commonwealth department of Education, Science and Technology define research in the following way:

> Research and experimental development comprises creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man (sic), culture and society, and the use of this stock of knowledge to devise new applications (DEST 2002:10).

Smith L.T. (1999) argues that when such a positivitst definition is applied to an indigenous research context by non-indigenous researchers, there has been a trend of systemic disempowerment of indigenous people as the research has been used as a tool of colonisation by the non-indigenous researchers. The DEST definition does not explicitly link the new applications of knowledge to the empowerment of research participants. On the other hand, this process is found in many indigenous research contexts. For example, one of the goals of research at the Curtin Indigenous Research Centre is;

> to undertake research promoting understanding and respect for Indigenous Australian cultures and ways of living past and present (CIRC 2002).

Another example comes from the assumption of research on health in a Maori context that states;

> The intended research is being undertaken to help address the significant differences in Maori and non-Maori health status. (Health Research Council 2002)

Both of these examples construct research as a means of empowering indigenous people. From an indigenous epistemological perspective, this has application to this study, where the research is grounded in critical theory. From a critical perspective, the reporting of the research back to the indigenous research participants in a way to 'maximise opportunity for benefit' (Smith, A. 1999), will be an important feature of this study.

The creation of a narrative report in Ndjébbana will be an integral part of the research as it will provide opportunities of empowerment to the Kunibídji research participants. Such a report would complement the academic text and together they would provide the Kunibídji opportunities to critically evaluate the research from the 'reading' of a narrated report in Ndjébbana and raise their awareness of the content of a thesis presented in English.

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Where a critical perspective is extended to the reporting back to the Kunibídji research participants, the thesis is transformed into a site where social theory is redefined for both academic and Kunibídji readers. The integrity of the research process is redefined as the empowerment of the Kunibídji becomes a central component of a thesis that also conceptualises Computer Assisted Ndjébbana to academic readers. The thesis becomes the DVD, that presents and archives both academic and Ndjébbana narratives. By including both reports in the thesis, the status of the indigenous research participants is raised as a space is created on the thesis that explicitly values their own language and cultural practice. Embedded in both the academic and Ndjébbana reports are the tools and data of the research, that would create the narratives which would expose the readers to a new electronic medium.

The second perspective on the framework in figure 1, is critical literacy, where literacy practices are deconstructed to empower the reader. Luke (1992:3) identified social literacy as the social practices that are constructed by individuals and groups that distribute knowledge and power. These social literacies are incorporated in critical literacies that cover a wider social semiotic theory. Critical literacies need to entail access and command over a range of contexts, texts, discourses and mediums (Walton 1996:6). A DVD thesis promotes access and command of the text by both academic and Kunibídji readers.

Aligned with critical literacy is a transformed pedagogy that analyses broader social issues relevant to the student's lives (Cummins 1996:157) and extends their designs of meaning to provide new opportunities and choices (New London Group 1996). As an educational institution the university specialises in extending the students designs of meaning. The thesis on a DVD simply presents Computer Assisted Ndjébbana in a form that would provide new opportunities and choices for academics and Kunibídji people alike. The thesis has been transformed so it is no longer a paper bound volume, presented in English, that limits its discourse to an elite group of people.

The third approach, shown in figure 1, is a critical view of technology, which complements the other two by examining the power of technology implicit in a thesis. Feenberg (1991:14) identifies a critical approach to technology as 'the scene of a struggle'. This approach is useful in describing the research conext. The design, creation and presentation of the Ndjébbana talking books on touch screens in an off-line environment was carried out against a backdrop of an emerging 'superculture in a communication age' (Lull 2001). However a critical approach to technology that also promotes concretization, vocation, aesthetic investment and collegiality (Feenberg 1991:189), is useful in describing the processes behind indigenous and non-indigenous readings of the thesis presented on DVD. Other approaches to technology are useful in describing a paper bound thesis.

This critical approach could be compared to a substantive theory of technology that restructures the social world as a object of control Heidegger (1977:17), where people serve technology rather than control it. The technology embedded in a paper bound thesis could be viewed through this substantive theory, where the Kunibídji and academic readers are structured as objects of control. The invisible technology of a paper bound thesis, is challenged in this research as the tools and data are digitalised. Rather than have the scholarly argument limited by a substantive approach to the form of a thesis, made evident in the rules and regulations of

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thesis, this research examines a new way indigenous people can be represented in a thesis. The scholarly argument and Kunibídji empowerment become the objects of social control not the current paper bound form of a thesis.

Although these three critical approaches are integrated throughout this paper to present an argument for presenting a thesis on a DVD, I am not challenging the scholarly content or structure of the thesis. I would still envisage the thesis to follow a similar structure found in other qualitative research. However the form would have three distinct differences. First the academic text and the Ndjébbana narrated report would be accessed by two buttons that appeared when starting the DVD. The different audiences would be catered for each report. Second, while the traditional chapters found in the theses will also be on the DVD, I would present them as a series of web pages. The contents page could be envisaged as being 'blue' with each chapter leading to a web page. There would be limited use of hypertext links inside each text so the arguments could be logically developed. The literature review for example would probably not have any links at all. The third difference is that as well as having figures and tables, I would also have Ndjébbana talking books, quicktime videos, pictures and sound clips embedded in the text. My arguments about the role of the computer in Computer Assisted Ndjébbana would be more powerful with these embedded resources. So while I am not changing the structure of the thesis, I am extending the content through this new form.

The choice of web pages as the medium for the thesis has spatial and temporal security. Spatially, most computers have browsers that can read the web, which will be used in an off-line environment when accessing the thesis on DVD. This would be a way of distributing the thesis across platforms and operating systems more readily. Temporally, browsers integrate rather than supersede their previous generations, so the thesis should be readable by web browsers in the future. The amount of information on the web is an insurance policy against any moves to create a whole new medium of information.

Logistical reasons

Logistically reasons are based around the transcription of Ndjébbana and its translation into English. The complexity of Ndjébbana and the limited exposure to print literacy make this process difficult. Due to the historical and social context of the Kunibídji, the levels of English print literacy of the Kunibídji are generally also limited. Altman (1987) has divided the post contact history Maningrida, into "three broad phases that correspond closely to the government's policy of protection and preservation, assimilation and integration, and self determination and self management "(p. 2). These can be contrasted with the Christianising, Educating and Aboriginalising phases of writing identified in another top end community Gale (1994). Due to their geographical location, the Kunibídji were left out of the missionary phase of integration, which promoted the use of printed English, amongst other things.

While having limited exposure to print, the Kunibídji maintain a strong oral tradition. Ndjébbana is classified as a non-Pama-Nyungan language as it makes use of prefixes as well as suffixes for derivation in inflection (McKay 2000 p. 155). Ndjébbana verb morphology is "rather complex" (McKay 2000 p. 156) which partly explains why only 250 books have been produced in Ndjébbana over the 25 year history of the program. Although one Kunibídji

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generally authors each book, they are checked extensively through a collaborative process that is time consuming and sometimes results in ambiguities that delay the production of texts. This impacts on my research as there is only a limited number of people who can write Ndjébbana. This would make the transcription of the videos difficult as the Kunibídji people who can write Ndjébbana are often overloaded by other government agencies or family. The rate of text development, as mentioned above, suggests the task of transcribing the volume of text needed for the thesis would take a long time.

As this problem arose in the research, I began to look for a solution. The Ndjébbana discourse around the computer was recorded by digital video. The transcription of spoken Ndjébbana into written Ndjébbana and then translation into English is more than I could ask of any Kunibídji research partnership. I began tinkering with the digital video and worked out at way to put subtitles below the video in field. This eliminated the transcription of oral to written Ndjébbana by translating oral Ndjébbana directly to printed English.

There were two logistical advantages in using digital video in the final presentation. First, it is more inclusive. More Kunibídji were involved in the translation process as it valued those who could not write Ndjébbana or English. The process of translation was kept informal and collaborative. Usually a group of Kunbídji created an oral discourse from the Ndjébbana discourse that was spoken on the video. When concensus had been reached, I transcribed this into English and then played the video back to the Kunibídji audience who offered more changes. The medium meant the subtitles were soft, they could be changed and moved to points of consensus. The value of such indigenous collaborative partnerships has been noted in the research (Smith G.H. 1992, Smith L.T. 1999:177.) What was interesting in the translation of some of the data was the children worked together with the adults and myself in the process. If the medium of the translation had been written this would probably not be the case. Raising the Kunibídji children's awareness of the collaborative nature of the research process was an important feature of the translation process. The authentic use of this data in the final presentation on DVD would value these relationships and provide conjectural opportunities for Kunibídji to critically examine the research activity.

A second advantage of these digital videos is that the same data can be used in the Ndjébbana report and English thesis by removing or including the English field text that shows the subtitling. This could be removed for the Ndjébbana report as it is not necessary. As the report in Ndjébbana is an integral part of the research process it needs to be designed in the most 'acceptable manner' (Lukabyo 1999). Removing the English subtitles on the video in the Ndjébbana report, constructs the Kunibídji social practice and Ndjébbana language as a authentic mode of communication to the Kunibídji in its own right, and shows respect for the research participants.

A third reason for using the videos in the final presentation is they can represent the complex discourse around the touch screens to non-indigenous examiners who will probably be illiterate in Kunibídji social practice. Just as there appears to be no pactical way to transcribe and translate the Ndjébbana discourse, there appears to be is no way to present the Kunibídji social practice and discourse around the computer to non-Kunibídji people. However to understand why video is so powerful in this Indigenous research context and to examine what a DVD can

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do when texts are embedded with video and talking books, semiotic reasons need to be discussed.

Semiotic reasons.

Semiotic reasons for presenting a thesis on a DVD will investigate how new digital literacies can provide better representations of meaning through their intertextuality and hybridity. Literacy is always evolving (Lankshire and Synder (2000:25) and an understanding of the inter-relationship between literacy and technology is needed to establish how we enact texts and make meaning. This is particularly important as my research presents new literacies in both an Indigenous Australian and academic contexts. To understand why my thesis should be presented on DVD from a semiotic perspective, the history of literacies will be presented. A discussion about the features of intertextuality and hybridity of the thesis will be followed by some semiotic justifications for reporting to the Kunibídji and academics on DVD.

Bruce (1998) suggests literacy in relation to technologies has developed in the following way.

→Primitive symbol systems
→Complex oral language
→Manuscript literacy
→Print literacy
→Video literacy
→Digital/multimedia /hypertext literacy
→Virtual reality

Bruce (1997) argues the evolution of literacy technologies is natural and inevitable which justifies the thesis on a DVD. The progression of from print to digital literacies is also a natural progression in many circles of academic work. Data projectors are becoming as invisible as whiteboards in lecture theatres. Presenting a thesis on a DVD could be seen as part of this progression. Some theses are now presented on CD. At Virginia technical college, for example, all theses have a presented in digital code (The chronicle of Higher Education 1998).

The semiotic reasons for presenting a thesis about computer assisted Ndjébbana on DVD can be framed in the context of these changing literacies. An important semiotic feature of digital literacies is their multimodality. The New London Group (1996) suggest the visual, linguistic, spatial, audio and gestural designs are all incorporated in an integrated meaning making system that is multimodal. Using digital video and Ndjébbana talking books, all elements of this multimodal meaning making system can be represented using DVD technology. When these elements are integrated with an academic text the research will hold more integrity.

Two key features of a multimodal meaning making system are the intertextuality and hybridity (Fairclough 1992:222, New London Group 1996). A multimedia thesis presentation would be an example of a mixed intertextuality which is characterised by different discourse types that are merged and difficult to separate (Fairclough 1992:118). There are two applications of intertextuality on a DVD thesis. First, the thesis can accurately document the intertextuality of the Ndjébbana talking books. These talking books integrate the different channels of text,

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sound and pictures and use intertextuality to convey meaning to the users. Each channel on its own carries only limited meaning and all the channels need to be played at once to convey the full meaning of the book. A second application of intertextuality in the thesis is the critical commentaries that could be provided with the talking books. The meaning would come from the reading the text and referencing to the multimedia element.

The hybridity of the text, that draws on the available designs of meaning to make new ones (Cope and Kalantsis 2000), is the second feature of multimodality. The creation of the Ndjébbana talking books is also a good example of Kunibídji hybridity. Older Kunibídji, who were not print literate, were recorded repeating pages of books from younger Kunibídji. These sounds were then linked to the each page of text, so that as the sound was spoken the text highlighted the words as they are read. Accepting a thesis on a DVD format is simply a matter of taking a page out of the Kunibídji nation's book on transformed practice.

My proposed DVD thesis explicitly challenges the lack of hybridity of theses in their current (paper bound) form. The rules and regulations about the form of a thesis need to evolve to make use of new literacies that can better represent an indigenous research context. Using a digital medium, I can integrate my tools and data to provide new types of thick and rich description of the informal research context. The videos of the interaction around the computer can be linked to the recorded traces on the screen. This can be presented together so as the children talk, the changing screen they were talking about can also shown next to the video. Subtitles can be placed under both the video and the talking books. These vignettes, when integrated with academic discourse, will provide one example of how a thesis on a DVD establishes a new hybridity, that is a more accurate representation of Kunibídji social practice around the computer.

Presented on DVD, using a critical research methodology, this thesis will promote a new hybridity that will integrate both academic and Ndjébbana narratives. The medium of the thesis will integrate a range of discourse types as well as indigenous and non-indigenous social practices. A thesis on DVD that is presented as the academic and Ndjébbana narratives. Gee (1996) has identified two kinds of discourse that are both evident in the digital videos recorded for this research. There are 'connected stretches of language that make sense' (Gee 1996:127) such as the talk around the computer and there are the 'ways of displaying membership in a particular social group' (Gee 1996:128), such as the non-verbal interactions around the computer. Using DVD technology, spoken Ndjébbana and Kunibídji social practice can be represented to an academic audience by embedding Ndjébbana talking books and digital videos in the text of the narrative. New digital literacies can represent a wider semiotic system more effectively than older literacies. Presenting a cross cultural thesis on a medium that can incorporate a wider semiotic system supports concise and valid descriptions that can be critically examined more reliably.

Latour(1994) notes that every human action is socio-technical. A paper bound thesis in this case would not just prevent the development of new hybrid texts, it would be a sociotechnical reduction of my research. Such a reduction means the tools and data would need to be transformed in a way where part of their meaning is lost. Halliday (1994) has identified the three elements of a text to be the field, tenor and mode, relating to function, relationships and

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channels respectively. The mode of a printed thesis will not describe the relationships around the computer or the machine agency that the children display in the discourse on the videos, with as much accuracy as the raw video presented on DVD.

From an academic perspective, the main problem of moving from digital tools and data created in a cross cultural context to print, is the loss of validity of the interpretive process. It is often difficult to describe the complexity and integrity of an event or phenomena using thick and rich descriptions as outlined by Linclon and Guba (1985). Research in this context would be more valid when the raw data is integrated into the final presentation with commentaries that support a thesis. Compressing the variety of digital channels of my data into print, distorts the human practices and the complexity of the discourse that is represented in the digital videos and talking books.

The contextualisation of the Kunibídji in the research is an important feature of the academic text for the audience to take the full meaning. From an academic reading of the text, Kessels and Korthagen (1996), note that research needs to link abstract rules and generalisations to faces and actions. The faces and actions represented on the tools and data of my research will support the rules and generalisations that I present on a DVD medium. As mentioned earlier, the majority of academics who read the thesis are culturally illiterate to Kunibídji human practices, so the contextualisation of the research will be an important to raise its validity. This contextualisation will also be important for the Kunibídji who wish to access the English thesis as well. The contextualised events and phenomena will provide scaffolding around which the Kunibídji can work with non-indigenous people to deconstruct the academic text for its meaning.

The contextualisation of the Kunibídji in a DVD thesis has implications for the validity of the report to the Kunibídji people in Ndjébbana. The oral tradition of Indigenous Australian people is much closer to electronic media than the printed word (Rose 1996:xx). One reason for this is the alienation by indigenous people in a one-directional form of communication found in print that makes knowledge cold and unchangeable (Nathan 2000). A second reason for contextualising the Kunibídji in their report is that oral traditions have suppleness deriving from their contextual embeddedness which provide occasions for regular reformation (Merlan 2000). The dimensional and participatory features of oral traditions are also found in electronic media in a range of indigenous Australian contexts.

A DVD thesis that reports the findings to the Kunibídji would fit the local Kunibídji situation as well as a wider Indigenous Australian trend of contextualisation. The abundant representations of the Kunibídji in the Ndjébbana bilingual program, captured on digital cameras and digital videos, suggest that their contextualisation on a thesis about computer assisted Ndjébbana would be rather straightforward. Laughren (2000:1) notes that as the number of Aboriginal languages have decreased, the range of media in which they are expressed has diversified. The presentation of a thesis on a DVD can be framed as part of a wider digitalisation by Indigenous Australians, which they have chosen to pursue.

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Ideological reasons

There are several ideological reasons for presenting a thesis on a DVD. The ideological reasons are built on the semiotic arguments that have been outlined above. As the thesis can be viewed as a ideological text, the empowerment of the readers and the contributors need to be examined. In the following section I will discuss how a Computer Assisted Ndjébbana thesis will empower the Kunibídji more effectively that one presented on paper by making them part of the audience of the final thesis

From an ideological perspective literacy practices are not only sociological or cultural but also powerful (Street 1995:161). When a thesis is presented on paper, there is a particular social group that is empowered as if it were natural, universal and normal. According to Postman (1986:14) "in every tool we create an idea is embedded that goes beyond the function of the thing itself". While the paper bound thesis presents scholarly arguments, the process of excluding oral arguments in the text has ideological consequences. The double tracked performance of an Aboriginal oral teller and a non-Aboriginal writer favours "the English" side as the dominant text (Eigenbrod 1995). As the tools and data of my research are predominantly oral representations of Kunibídji cultural practices, I need to look for new mediums that can integrate the oral and written texts of indigenous and non-indigenous people. A DVD thesis provides an opportunity to present both reports on the same medium.

As well as integrating both oral and written modes of communication, a DVD thesis provides more accurate representation of the Kunibídji in the thesis. The inaccurate representation of indigenous people by non-indigenous researchers in the past has proven problematic.

> So, reading and interpretation present problems when we do not see ourselves in the text. There are problems, too, when we do see ourselves but can barely recognise ourselves through the representation. (Smith L.T. 1999:35).

A DVD thesis can embed the multimedia in the academic discourse to provide a more valid representation of the Kunibídji than written accounts of vignettes on paper. These accurate representations of the Kunibídji will give the research integrity. McLuhan (1967) identified how media can provide an extension to our lives. A thesis on a DVD extends both academic and Kunibídji lives without alienating either party. As both reports can be presented on the same medium, it also gives parity to the two reports that has not yet been possible. The awareness of the research process can be raised with the Kunibídji and the possibilities of the research methodology can both be extended using a DVD medium.

From this global ideological view of texts, there are specific issues concerning the ideology of the reduction of Kunibídji social practice and Ndjébbana language to print. Mülhäusler warns of 'reducing pacific languages to writings' (Mülhäusler 1990), claiming amongst other things, that 'literacy is seen to reflect the truth' (Mülhäusler 1996). A paper bound thesis is a reduction of Ndjébbana to writing like the any printed Ndjébbana books. However the Ndjébbana talking books are an attempt to maintain linguistic diversity through a variety of channels that promote both oral and print based Kunibídji participation. A DVD thesis does not reduce the wider writings of the research to print, but uses a wider semiotic meaning of text to promote linguistic

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diversity. The ability to integrate the oral and written voices of indigenous people into a thesis needs to be celebrated as a way of legitamising their contribution to scholarly knowledge.

The voice will do more than promote sound research methodology, it will provide a space where Indigenous knowledge becomes represented in a thesis. Maurial (1999:63) argues that indigenous knowledge is local, holistic and agrapha (orally transmitted). A DVD medium will be able to represent this knowledge through the channels of multimedia. This has direct empowerment implications for the two audiences of the thesis. For the Kunibídji, valuing the local literacies is a way of giving power to the voices of indigenous people who are outside the development establishment (Semali 1999:104). Valuing oral and written Ndjébbana has been a feature of this study and should also be a feature of the thesis that has critical research methodology. From an academic perspective, valuing indigenous knowledge that can be better represented in a DVD thesis is vital to bring about social change. Academics need to soak themselves in indigenous epistemologies which move in new ways to Western Academic impulses (Freire and Faundez 1989:46). A DVD thesis is the best medium for this academic soaking in an indigenous epistemology.

There are other ideological reasons that are concerned with the ethics of presenting a thesis on Computer Assisted Ndjébbana on DVD. The four principles of ethical conduct; integrity, respect for persons, beneficence and justice (National Statement on Ethical Conduct in Research Involving Humans 1999) are upheld as the thesis is transformed to a DVD medium. From an integral point of view, the semiotic and logistical arguments for the thesis on a DVD, demonstrate how the research is committed to searching for knowledge based on recognised principles research conduct. Using a critical research perspective, the integrity of the research is provided on a DVD as the reports will be more accessible to the Kunibídji.

The second principle of ethical conduct is respect (National Statement on Ethical Conduct in Research Involving Humans 1999). Smith L. T. (1999:120) suggests that all sound participatory research practice should be based on a sense of 'respect'. The denial of the right to Indigenous self determination is mark of the lack of respect that has plagued the relations between indigenous and non-Indigenous peoples. Ivanitz (1999) suggests participatory research lies between token involvement and power sharing, and the more respect, the more power sharing. The thesis on a DVD supports the participation of the Kunibídji through many stages of the research. I have explained how the use of digital videos in the interpretive stage of the research has not only involved more Kunibídji in the translation of the discourse, it has also made more Kunibídji aware of the research methodology. This awareness, combined with the conceptualisation of the results, suggests the research partnerships are based on power sharing. From Smith's perspective, I would argue the research is framed in a deep respect for Indigenous self determination in the tools developed for the research. The talking books provide the Kunibídji with a new lifeworld that provides greater choice over how their first language can be taught. The research partnerships developed while creating the talking books and analysing the video data can be extended if the thesis is presented on a DVD. A thesis on a DVD also extends Kunibídji design's of meaning, providing another choice in how research can be reported back to their community.

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The beneficence of the research, the third ethical consideration, is upheld from considering the informal context of the research. Smith (1999:79) has argued the more formal the research, the more authoritarian it becomes, which disempowers indigenous people. Both the research process and the products have been kept informal to empower the Kunibídji people. The groups of children and adults around the computer were the same family groups of other informal learning. The children always were in control of whether they stayed around the computer.

This beneficence is also linked to the transparency of the thesis. Levy (1997:184) and Winnongrad and Flores (1986:164) argue the computer is most effective when it takes the role as a transparent tool. This transparency was achieved in the research process through the transformation of the computer to a touch screen that did not exclude Kunibídji with limited computer literacy skills. The transparency of a thesis for the Kunibídji can be achieved by using DVD technology to present a report that can be accessed on the touch screens in Maningrida.

Indigenous academics are another group of people who would also benefit from my research presented on DVD. Recently there has been a call by indigenous academics to create and control an indigenous research agenda (Smith, L. T.1999, Nakata 2000, Foley 2000,Tsey 2001, Collard and Pickwick 1999). Presenting the thesis on a DVD will encourage more 'participation, collaboration, debate and criticism' (Collard and Pickwick 1999) of my research by Indigenous Academics. This is due to the transparency of the progression from tool development, to its testing, and evaluation, in my research. Presented in a digital form, my research can provide contextual multimedia examples that explicitly show how I have drawn my conclusions. Indigenous academics will be able to critically examine my research findings with reference to my raw data and deconstruct the research methodologies embedded in my thesis.

There may be elements of this digital qualitative research reporting that may be benefit indigenous academics as they define a research agenda. Walker (2000) argues that indigenous paradigms are needed in research to manage knowledge that reflects indigenous realities. Some of these realities include interconnectedness, a focus on process, spiritual experience and a strong relationship with the natural world (Walker 2000). Indigenous academics are incorporating these realities as a valid research agenda and finding ways to share the results to a wide range of community members (Smith 1999:16). While this research has been carried out from the perspective of a non-indigenous person, a DVD medium has application in presenting a more holistic representation of the Kunibídji knowledge systems to both indigenous and non-indigenous people.

Conclusion

The colonial nature of research is apparent when I consider two contexts of my critical approach. In Maningrida, I am able to carry out research with a group of indigenous people that examines their reactions when I totally transform their literacy practices around their homes. In Ballarat, however, I need to justify my research methodology much more concisely to get permission to present my research findings in a form that is no longer new to many

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examiners. Theses have the potential to systemically disempower indigenous people when they are presented in a form that excludes them from accessing and critically assessing its content. Presenting a thesis about Computer Assisted Ndjébbana on DVD is one small emancipatory step for the Kunibídji as they are represented more accurately to the academic world while being able to a access a report in their own language. The text of the thesis becomes more accessible to the Kunibídji which is the first stage demystifying the research methodology. Archiving both reports with the same parity on a DVD is an important critical research outcome for both indigenous and non-indigenous people. Using the new DVD medium, the empowerment of the Kunibídji can now be extended to the domain of research reporting, where Indigenous people have historically been excluded.

References

Altman, J.C. (1987). *Hunter-gatherers today : an Aboriginal economy in north Australia,* Canberra: Australian Institute of Aboriginal Studies.

Bruce, B. C. (1997). Critical Issues Literacy Technologies: What stance should we take ? *Journal of literacy Research 29*(2), 289-309.

Bruce, B. C. (1998). New literacies, *Journal of Adult and Adolescent Literacy, 42*(1), 46-49.

Carspecken, P. F. (1996). *Critical Ethnography in Educational Research.* London:Routledge.

Chronicle of Higher Education (1998). Colloquy. Retrieved May 20, 2002 from the World Wide Web: http://chronicle.com/colloquy/98/thesis/background.htm

Collard, L. & Pickwick, T. (1999). Anyungar at Research In School of Indigenous Australian Studies (eds.), *Indigenous Research Ethics, Papers from the conference held in Townsville in September 1995,* pp 29-37. Townsville: Centre for Social and Welfare Research, James Cook University.

Cope, B. and Kalantzis, M. (2000) Designs for social futures. In B. Cope and M. Kalantzis (Eds.), *Multiliteracies: Literacy learning and designs of social futures* (pp. 203-234). London: Routledge.

Cummins, J. (1996*). Negotiating identities.* Ontario: California Association for Bilingual Education.

Curtin Indigenous Research Centre (2002). CIRC Overview. Retrieved May 21, 2002 from the World Wide Web: http://gunada.curtin.edu.au/circ/overview/index.html

Department of Education, Science and Technology (2002). Higher education research data collection. Retrieved May 21, 2002 from the World Wide Web: http://www.detya.gov.au/highered/research/herdc.htm#specifications

BEST COPY AVAILABLE

Eigenbrod, E. (1995). The oral in the written: A literature between two cultures, *The Canadian Journal of Native Studies, 15*(1),89-102.

Fairclough, N. (1992). *Discourse and Social Change.* Cambridge: Polity Press.

Feenberg, A. (1991) *Critical theory of technology.* New York: Oxford University Press.

Foley, D. (2000). Indigenous research, differing value systems, *The Australian Journal of Indigenous Education, 28*(1), 17-30.

Foucault, M. (1977). 'Truth and Power', interview in Power/Knowledge: Selected interviews and other writing 1972-1977, ed. C. Gordon, 1980, trans, C.Gordon, L. Marshall, J. Mephan & K. Soper, Pantheon Books, New York.

Freir, P. & Faundez, A. (1989). Learning to Question: A pedagogy of liberation. New York: Continuum.

Gale, M (1994), Dhangum djaorra'wuy Dhäwu: A brief history of writing in Aboriginal languages , *Australian Journal of Indigenous Education*, vol. 22, no. 1, pp.33-42.

Gee, J.P. (1996). *Social linguistics and literacies,* London: Falmer Press.

Halliday, M.A.K. (1994). Language as Social Semiotic. In J. Maybin. (ed.), *Language and Literacy in Social Practice*,pp 24-43. Clevedon: Multilingual Matters.

Health Research Council (2002). Baseline Assumptions. Retrieved May 21, 2002 from the World Wide Web:
http://www.hrc.govt.nz/Maoguide.htm#3.3%20%20Baseline%20assumptions

Heidegger, M. (1977). *The question concerning technology.* London: Harper.

Ivanitz, M. (1999). Culture, ethics and participatory methodology in cross-cultural research, *Australian Aboriginal Studies, 2,* pp. 46-58

Kessels, J. P., & Korthagen, F. A. (1996). The Relationship Between Theory and Practice: Back to the Classics. Educational Researcher, *25*(3), 17-22.

Lankshire, C., Snyder, I & Green, B. (2000). *Teachers and technoliteracy.* Sydney: Allen and Unwin.

Latour, B. (1994). Pragmatogonies: A mythical account of how humans and nonhumans swap properties. *American Behavioral Scientist 37*(6), 791-808.

Laughren, M. (2000). Australian Aboriginal languages: their contemporary status and functions. In R.M.W. Dixon and B.J. Blake (Eds.), *The Handbook of Australian Languages Volume 5* (pp.1-32). South Melbourne, Australian: Oxford University Press.

BEST COPY AVAILABLE

Levy, M. (1997). *Computer Assisted Language Learning, Context and Conceptualisation.* Oxford: Clarendon Press.

Lincoln, Y. S. and Guba, E. G. (1985). *Naturalistic Inquiry.* Beverley Hills: Sage.

Lukabyo, J. (1999). Principles of community action research and Indigenous research ethics. In School of Indigenous Australian Studies (eds.), *Indigenous Research Ethics, Papers from the conference held in Townsville in September 1995,* pp 75-81. Townsville: Centre for Social and Welfare Research, James Cook University.

Luke, A. 1992, 'The social construction of literacy in the primary school', in *Literacy, Learning and Teaching: Language as a Social Practice in the Classroom*, ed. L. Unsworth, Macmillan, Melbourne.

Lull, J. (2001). Superculture for the communication age, In J. Lull (Ed.), *Culture in the communication Age*, pp. 132-163. New York: Routledge.

McKay, G. (2000). Ndjébbana. In R.M.W. Dixon and B.J. Blake (Eds.), *The Handbook of Australian Languages Volume 5* (pp.155-354). South Melbourne, Australian: Oxford University Press.

McLuhan, M. (1967) *Understanding Media.* London: Routledge and Kegan Paul.

Merlan, F. (2000). Representing the rainbow: Aboriginal culture in an interconnected world. *Australian Aboriginal Studies 2000*(1&2), 20-26.

Mülhäusler, P. (1990). "Reducing" Pacific languages to writing. In J. E. Joseph & T. J. Taylor (Eds.), *Ideologies of language* (pp.189-205). London: Routledge.

Mülhäusler, P. (1996). *Linguistic ecology: Language change and linguistic imperialism in the Pacific Region.* London: Routledge.

Muarial, M. (1999). Indigenous Knowledge and Schooling: A continuum between conflict and dialogue. In L. M. Semali & J. L. Kincheloe, (Eds.), *What is Indigenous Knowledge? Voices from the Academy*, (pp.59-78). New York:Falmer.

Nakata, M. (2000). History, cultural diversity and English language teaching. In B.Cope and M. Kalantzis (Eds.) *Multiliteracies* (pp. 106-120). London: Routledge.

Nathan, D.(2000). Plugging in Indigenous knowledge:connections and innovations. *Australian Aboriginal Studies 2000*(1&2), 39-47.

National Health and Medical Research Council (1999). National Statement on Ethical Conduct in Research Involving Humans, Commonwealth of Australia.

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New London Group. (1996). A pedagogy of multiliteracies: Designing social futures. *Harvard Educational Review, 66,* 60-92.

Postman, N. (1985). *Amusing ourselves to death.* New York: Routledge.

Rose, M.E. (1996). Introduction in *For the Record:160 Years of Aboriginal Print Journalism,* Sydney: Allen and Unwin.

Semali, L.M. (1999). Community as a classroom: (re)Valuing Indigenous Literacy. In L. M. Semali & J. L. Kincheloe, (Eds.), *What is Indigenous Knowledge? Voices from the Academy,* (pp.95-118). New York:Falmer.

Smith, A. (1997). Indigenous Research Ethics: Policy, Protocol and Practice, *The Australian Journal of Indigenous Education, 25*(1), 23-29.

Smith, G. H. (1992)*The issue of research and Maori.* Auckland, Research Unit for Maori Education, University of Auckland.

Smith, L.T. (1999). *Decolonizing Methodologies.* London: Zed Books.

Street, B. (1995). *Social Literacies.* Essex, Longman.

Tsey, K.(2001). Making research more relevant to the needs and aspirations of Indigenous Australians: The importance of research capacity development. *The Aboriginal and Islander Health Worker Journal, 25*(1), 19-24.

Walker, P. (2000). Native approaches to Decolonising education in institutions of higher learning. *The Australian Journal of Indigenous Education, 28*(2), 28-33.

Walton, C. (1996). *Critical Social Literacies,* NTU Press, Darwin.

Winograd, T. & Flores, F. (1986). *Understanding Computers and Cognition,* Reading, Mass.: Addison-Wesley.

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